

REMARKS

Claims 1 to 16 are pending in the application.

Rejection under the Doctrine of Obviousness-type Double Patenting

Claims 1-7 and 9-16 stand rejected under the doctrine of double patenting over claims 1-17 of *US 5,785,621* and *Hood (5,087,327)*.

The examiner states that *US 5,785,621* shows all limitations of the instant claims except for the use of the starch yarn to provide voids in the fabric. The use of starch yarns having a soluble core is taught by *Hood*.

Claim 8 stands rejected under the doctrine of double patenting over claims 1-17 of *US 5,785,621* and *Hood (5,087,327)* as well as *Cunnane, III et al.*

Cunnane, III et al. teach the use of hollow monofilament yarn in wet press felt fabric in order to improve dewatering.

Claim 1 has been amended to define the drainage channels as being mechanically woven into the fabric belt, i.e., the channels are produced by the weaving pattern alone independent of the material of the fibers or yarns, and extending from the upper paper side to the underside of the fabric belt. This is disclosed in the specification, for example, in paragraph 0031, and shown especially in Fig. 1. This configuration allows water to drain away quickly from the paper side to the bottom side.

In contrast to this, the claims 1-17 *US 5,785,621* are silent in regard to any arrangement of drainage channels within the fabric.

Hood (5,087,327) discloses drainage channels that are produced by washing out a soluble core material from the woven yarn structure. *Hood* does not disclose mechanically woven channels.

Moreover, *Hood* discloses channels that extend **in the plane of the fabric** oriented in the longitudinal and the transverse directions (see col. 2, lines 57-63). Figs. 2a and 2b show cross-sections of the fabric taken along section lines indicated in Fig. 1. Fig. 2a shows the yarns before the washing step (core 24 is still present); Fig. 2b shows a section view after washing illustrating the channels formed within the yarns 20. As pointed out in col. 4, lines 35-45, the tubular configuration of the yarns 20 enables water to be conducted

in the longitudinal direction of the fabric away from the press nip and, at the same time, the hollow yarns 20 provide resilience to bear the compression within the nip and to spring back to original form when pressure is removed.

Therefore, the teaching of *Hood* is clearly that the fabric is to be provided with yarns that, after weaving the fabric and washing the fabric (prior to washing and removing the core material, there are no woven-in channels in the fabric), form longitudinal channels or transverse channels in the plane of the fabric in order to facilitate removal of water in the plane of the fabric away from the nip. At the same time, the washed-out channels provide resilience and spring-back of the fabric in the pressing direction of the nip, i.e. perpendicular to the longitudinal and transverse extension of the channels.

The present invention as claimed in claim 1 however provides mechanically woven channels (the weaving pattern creates the channels) in the fabric belt that extend in a direction from the upper paper side to the underside of the fabric belt. This is not obvious in view of the prior art references.

Cunnane, III et al. teaches hollow monofilament yarns. These yarns are not provided as drainage channels but as resilient fibers to allow the fabric to be flattened better within the nip of the pressing rollers and to improve rebound of the fabric after passing the nip. The improved dewatering and avoidance of rewetting is not caused by water being channeled in the voids of the filaments but by the ability of the monofilaments to undergo compression and to rebound into their original configuration. This prior art reference therefore does not provide any disclosure in regard to mechanically weaving channels into the fabric that extend from the paper side to the underside of the fabric belt.

Claim 1 and its dependent claims are therefore not obvious in view of the cited prior art references. Reconsideration and withdrawal of the rejection under the doctrine of double patenting are therefore respectfully requested.

CONCLUSION

In view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Should the Examiner have any further objections or suggestions, the undersigned would appreciate a phone call or e-mail from the examiner to discuss appropriate

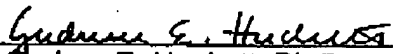
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amendments to place the application into condition for allowance.

Authorization is herewith given to charge any fees or any shortages in any fees required during prosecution of this application and not paid by other means to Patent and Trademark Office deposit account 50-1199.

Respectfully submitted on October 20, 2004,


Ms. Gudrun E. Hockett, Ph.D.
Patent Agent, Registration No. 35,747
Lönsstr. 53
42289 Wuppertal
GERMANY
Telephone: +49-202-257-0371
Facsimile: +49-202-257-0372
gudrun.draudt@t-online.de

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